Continued from page 107 out of the violas and celli in the Walker piece.

The second album is unabashedly contemporary in sound and method. Olly Wilson's Akwan (1974) uses a Fender-Rhodes electric piano and amplified strings, though it is not technically an electronic composition. Nevertheless, the interplay among the trombones near the beginning, the manner in which percussion and the Fender-Rhodes are employed, and the overall abstraction of the piece give it a distinct electronic-music flavor (particularly of the tape-with-orchestra variety). Wilson uses novel voicings (especially in the brass), displays a highly developed consciousness of rhythm/arhythm, and has a masterful sense of timing which allows him to extend an idea until just before the moment monotony would set it. Akwan is, to my ears, a major work, one which will be heard and discussed often in the future.

T. J. Anderson's Squares (1965) involves such things as symmetries of fragmented phrases, overlapping tone-color "platforms," and the like. What would seem on paper a disjointed collection of disparate ideas, sounds quite unified, thanks to the ingenuity of Anderson's systems of grouping. Though it is an atonal, essentially themeless work, it is no doubt the kind of indisputably contemporary composition that will nonetheless appeal to musical conservatives, if only because the pieces fit together into such a neat, acces-

sible bundle. Talib Rasul Hakim may be an unfamiliar name because the composer first attracted attention as Stephen Chambers. Visions of Ishwara (1970) is an esoteric and stately work, which begins and ends with an exotic alto flute line over a ceremonial-processional bass drum pulse. The trombone, tuba, and percussion parts are seemingly derived from Tibetan ritual music, with the rest of the orchestra arranged so that each group of instruments seems to seek its own level at random. The effect is not unlike a Sun Ra improvised ensemble, translated into orchestral-block terms. Visions is a very impressive composition, which should help the composer retain his reputation under his new name.

It's always difficult to judge the performance of a new and complex composition without access to the score (and sometimes even with the score), but all three works seem to have received tour-de-force realizations by Freeman and Richard Bunger, soloist on Akwan.

Tom Bingham
Sound: A

Performance: A

# **Annual Index**

## **Subject Index**

#### AM Radio

Quality AM Radio, George McKay, Jan., 28.

#### **Amplifiers**

Bi-Amplification, John M. Lovda and Stephen Muchow, Sept., 20. Power FETs, Bascom H. King, Feb., 42. Transient IM Distortion, W. Marshall Leach, Feb., 34.

Cassette Decks: How Well Do They Stack Up, George W. Tillett, Sept., 38.

Christmas Buying Guide, Nov., 54.

#### **Construction Articles**

Build an Audio Generator, M. J. Salvati, Oct., 22.
Build A Dynamic Noise Suppressor, Maxwell S. Strange, June, 34.

Crossword Puzzle, Aug., 38.

dBs Made Simple, Herman Burstein, Jan., 36

#### **Directories**

Annual Product Directory, October. Addenda, December, 77.
Directory of Manufacturers, Oct., 30
Amplifiers, 36; Cassette and Cartridge Tape Decks, 72; Equalizers, 105; Headphones, 102; Loudspeaker Systems, 76; Microphones, 106; Multi-Play Turntables, 58; Open-Reel Tape Decks, 68; Phono Cartridges, 64; Preamplifiers, 44; Receivers, 52; Single-Play Turntables and Tonearms, 60; Tuners, 48.
Car Speakers Directory, July, 18.

Car Speakers Directory, July, 18. Car Stereo Radio/Tape Player Directory, July, 13. Car Stereo Radio/Tape Player Manu-

facturers, July, 12.

#### **Equipment Profiles**

Ace Audio ZDP Preamplifier, April, 60.

ADS 2001 Car Speaker System, July, 36. AKAI GX-400D-SS Open-Reel Tape Deck, Feb., 56.

Avid 102 Speaker System, Sept., 62. Becker Mexico Car Radio, July, 25. B&O BE-2200 Cassette Deck, Aug., 67. BGW 500D Basic Amplifier, Dec., 76. C/M Laboratories, RR-805 Receiver, June, 54. Craig 3139 Car Radio, July, 25; addenda, Oct., 20.

Crown VFX/2 Crossover/Filter, Dec., 69.

Dynaco 400 Basic Amplifier, May, 46. ELAC 760 Automatic Turntable, Aug., 62.

Elekt-O-Fonie FU-100 Receiver, Apr., 54.

EPI One Basic Amplifier, Nov., 66. Ferrograph Super Seven Open-Reel Tape Deck, Mar., 42.

Fisher ST-425 Speaker System, Jan., 48. GAS Ampzilla Basic Amplifier, Sept., 57

Heath AR-2020 Receiver, June, 48. Hitachi HS-300 Speaker System, Mar., 46.

J.I.L. 605 Car Radio, July, 26. JVC 4VR-5426X Receiver, Aug., 47. Kensonic C-200 Control Amplifier, P-300 Basic Amplifier, Mar., 49. Kenwood KP-5022 Turntable, Sept.,

65. Kenwood KX-710 Cassette Deck, Apr.,

65. Koss HV/1A Headphones, Dec., 68. Marantz 125 Tuner, Feb., 54.

Nakamichi 500 Cassette Deck, Nov., 62.

Nakamichi Large Reference Monitor Speaker System, Dec., 72.

Panasonic CQ-999 Car Radio, July, 28. Phase Linear 4000 Preamplifier, Nov., 58.

Philips RH-532 Speaker System, Apr., 67.

Pickering XUV/4500Q Phono Cartridge, Nov., 71.

Pioneer KP-301 Car Radio, July, 30. Pioneer CT-F7171 Cassette Deck, Nov. 72

Polk Nine Speaker System, May, 36. Radio Shack STA-225 Receiver, Dec. 46

SAE Mk IIICM Basic Amplifier, Jan., 61; Addendum, Aug., 69.

Sansui 881 Receiver, Apr., 55. Scott R77S Receiver, May, 32.

Sharp RT-480U Cassette Recorder Addendum, Jan., 65.

Sherwood 7210 Receiver, July, 34. Shure M-64 Preamplifier, Feb., 61. Sony TC-755 Open-Reel Tape Deck, Sept., 67.

Soundcraftsmen PE-2217 Equalizer, Mar., 36.

Supex SD-900/E Phono Cartridge, Sept., 60.

Sylvania AS-210A Speaker System, Aug., 63.

Technics by Panasonic RS-676 Cassette Deck, May, 72.

Technics by Panasonic T-400 Speaker System, Dec., 54.

Technics by Panasonic SA-8500X Receiver, Mar., 31.

Wollensak 8080 8-track Cartridge Deck, Aug., 52.

Yamaha B-1 Basic Amplifier, Aug., 56. Yamaha CR-1000 Receiver, Jan., 44. Yamaha CT-7000 Tuner, Dec., 64.

Yamaha YP-701 Automatic Turntable, June, 52.

**FTC Ruling On Amplifiers** 

FTC Wattage Ratings: An Optimistic View, Brian Wachner, Feb., 22. FTC Wattage Ratings: An Alternative View, Robert Tucker, Feb., 30. How Valid is the FTC Preconditioning Rule?, Joseph DeMarinis, Sept., 30.

**Headphones** 

Dual Impedance Headphone Circuit, D. A. Kerr, May, 24. Piezoelectric Principle in Headphones, Martin Clifford, May, 28.

Language of High Fidelity, Part XIII, Martin Clifford, Dec., 38.

Miking With The Three-Point System, Dec., 28.

Quadraphony

What Do You Really Hear in Quadraphony?, Daniel Shanefield, Nov., 44. Up-Date: Musings on the Four-Channel Scene, George W. Tillett, Nov., 36.

Record Cleaners—Do They Really Work? B. V. Pisha, Mar., 20.

**Loudspeaker Systems** 

Earthquake Sound System, C. J. Czerwinski and G. R. Lewis, Apr., 46. Motional Feedback in Loudspeaker Systems, George W. Tillett, Aug., 40. Speaker Tests, Richard C. Heyser; Polar Response, May, 30; Room Test, Jan., 66.

A. N. Thiele—Sage of Vented Speakers, Ray J. Newman, Aug., 30.

Recording at Home Through the Years, George Blacker, Apr., 28.

Sun Ra, The Many Worlds of, Tom Bingham, Mar., 56.

Syn-Aud-Con—Audio Toolmaker, Carolyn P. Davis, Sept., 54.

Making Tape, Joseph Kempler, Apr., 38.

Basics of Turntables, David L. Josephson, June, 26.

Adoption of the Westrex 45/45 System, Ralph W. Wight, Mar., 24.

### **Author Index**

Bingham, Tom, The Many Worlds of Sun Ra, March, 56.

Blacker, George, Home Recording Through the Years, April, 28.

Burstein, Herman, dBs Made Simple, Jan., 36.

Clifford, Martin, Language of High Fidelity, Dec., 38; Piezoelectric Principle in Headphones, May, 28.

Czerwinski, C. J. and G. R. Lewis, Earthquake Sound System, April, 46. Davis, Carolyn P., Syn-Aud-Con: Audio Toolmaker, Sept., 54.

**DeMarinis,** Joseph, How Valid is the FTC Preconditioning Rule?, Sept., 30.

Feldman, Leonard, Five Car Radios Tested, July, 24.

Heyser, Richard C., Speaker Tests—Polar Response, May, 30; Room Tests, Jan., 66.

Josephson, David L., Basics of Turntables, June, 26.

**Kempler,** Joseph, *Making Tape*, April, 38.

Kerr, D. A., Dual Impedance Headphone Circuit, May, 24.

King, Bascom H., Power FETs, Feb., 34.
Leach, W. Marshall, Transient IM Distortion, Feb., 34.

Lewis, G. R., and C. J. Czerwinski, Earthquake Sound System, April, 46. Lovda, John M. and Stephen Much-

ow, Bi-Amplification, Sept., 20.

McKay, George, Quality AM Radio,
Jan., 28.

Muchow, Stephen, and John M. Lovda, Bi-Amplification, Sept., 20. Newman, Ray J., A. N. Thiele—Sage of

Vented Speakers, Aug., 30.
Pisha, B. V., Record Cleaners—Do

They Really Work?, March, 20.

Salvati, M. J., Build an Audio Gener-

ator, Oct., 22.

Strange, Maxwell G., Build a Dynamic

Noise Supressor, June, 34.

Tillet, George W., Cassette Decks, How Well Do They Stack Up?, Sept., 38; Motional Feedback in Loudspeakers, Aug., 40; Up-Date: Musings on the Four Channel Scene,

Nov., 36. **Tucker**, Robert, FTC Wattage Ratings:

An Alternative View, Feb., 30.

Wachner, Brian, FTC Wattage Ratings: An Optimistic View, Feb., 22.
Wight Ralph W. Adoption of the

Wight, Ralph W., Adoption of the Westrex 45/45 System, March, 24.

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION, Act of August 12, 1970; Section 3685, Title 39, United States Code.

Date of Filing, September 15, 1975, 2. Title of Publication, AUDIO; 3. Frequency of Issue, Monthly; 4. Location of Known Office of Publication, 134 N. 13th Street, Philadelphia, Penna. 19107; 5. Location of the Headquarters or General Business Offices of The Publishers, 134 N. 13th Street, Philadelphia, Penna. 19107.

 Names and Addresses of Publisher, Editor, and Managing Editor: Publisher, Jay L. Butler, 134 N. 13th Street, Philadelphia, Penna. 19107; Editor, Eugene Pitts III, 134 N. 13th Street, Philadelphia, Penna. 19107; Managing Editor, none.

Owner, North American Publishing Company,
 N. 13th Street, Philadelphia, Penna. 19107. I. J.
 Borowsky, 134 N. 13th Street, Philadelphia, Penna. 19107.

 Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages or Other Securities: None.

9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona-fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages, or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation.

 This item must be completed for all publications except those which do not carry advertising other than the publisher's own and which are named in Sections 132,231, 132,232 and 132,233. Postal Manual (Sections 4355a, 4355b, and 4356 of Title 39, United States Code).

|    |  | Average no. copies each   |                            |
|----|--|---------------------------|----------------------------|
|    |  | issue during<br>preceding | Single issue<br>nearest to |
|    |  | 12 months                 | filing date                |
| A. | Total no. copies printed<br>(Net Press Run)                                | 123,570                   | 125,025                    |
| B. | Paid circulation   |                           |                            |
|    | <ol> <li>Sales through dealers and<br/>carriers, street vendors</li> </ol> |                           |                            |
|    | and counter sales  | 24,444                    | 23,539                     |
|    | 2. Mail Subscriptions  | 77,521                    | 79,418                     |
| C. | Total paid circulation   | 101,965                   | 102,957                    |
| D. | Free Distribution by Mail,   |                           |                            |
|    | Carrier or other means   |                           |                            |
|    | <ol> <li>Samples, complimentary,<br/>and other free copies</li> </ol>      | 4,828                     | 5,597                      |
| E. | Total distribution   |                           |                            |
|    | (Sum of C and D)   | 106,793                   | 108,554                    |
| F. | <ol> <li>Office use, left-over<br/>unaccounted, spoiled</li> </ol>         |                           |                            |
|    | after printing   | 1,009                     | 1,071                      |
|    | <ol><li>Copies distributed to new<br/>after printing</li></ol>             | s<br>15,768               | 15,400                     |
| G  | Total (Sum of E and F—<br>should equal net press run                       |                           |                            |
|    | shown in A)  | 123,570                   | 125,025                    |
|    |  |                           |                            |

I certify that the statements made by me above are correct and complete.

JAY L. BUTLER, Publisher